

PCT

10/553474

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 1200306WO	FOR FURTHER ACTION		See item 4 below
International application No. PCT/US2004/012233	International filing date (day/month/year) 21 April 2004 (21.04.2004)	Priority date (day/month/year) 23 April 2003 (23.04.2003)	
International Patent Classification (IPC) or national classification and IPC G01J 3/00, G06F 17/30, G06T 1/00, B44D 3/00			
Applicant POLYONE CORPORATION			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 8 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input type="checkbox"/> Box No. II | Priority |
| <input checked="" type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	Date of issuance of this report 28 October 2005 (28.10.2005)
	Authorized officer Yolaine Cussac Telephone No. +41 22 338 70 80

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 07 MAR 2005

PCT WPP PCT

To:

see form PCT/ISA/220

RTI

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/US2004/012233

International filing date (day/month/year)
21.04.2004

Priority date (day/month/year)
23.04.2003

International Patent Classification (IPC) or both national classification and IPC
G01J3/00, G06F17/30, G06T1/00, B44D3/00

Applicant
POLYONE CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for International preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/012233

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/012233

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 9,12

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the whole application or for said claims Nos. 9,12
- ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
 - the written form ☐ has not been furnished
 - ☐ does not comply with the standard
 - the computer readable form ☐ has not been furnished
 - ☐ does not comply with the standard
- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
- ☐ See separate sheet for further details

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/012233

Box No. V Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-8,10,11
Inventive step (IS)	Yes: Claims	
	No: Claims	1,8,10,11
Industrial applicability (IA)	Yes: Claims	1-8,10,11
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item III.

1. The subject-matter of claims 9, 12 is a mere presentation of information, cf. Rule 39.1 (v) PCT, PCT Guidelines 9.11 and 9.12.

Re Item V.

1. Reference is made to the following documents:

D1 = WO-A-01/97090

D2 = US-A-6 011 540

D3 = US-A-5 692 071

D4 = EP-A-626 781

D5 = US-A-5 121 196

D6 = US-A-4 929 978

- 2.1 D1 discloses a method of mapping a colour space with chromatic formulations, said method comprising the steps of selecting a number of chromatics for use with a bulk material, formulating the chromatics to generating a plurality of chromatic formulations and computing additional chromatic formulations using algorithms reflecting the contribution of the chromatics and incremental substitutions thereof (see on page 7, lines 13-23, page 8, lines 6-15 and 29-31, page 9, lines 1-29). Insofar as it can be understood (see Item VIII) the subject-matter of claim 1 is therefore already known (Art. 33 (2) PCT).

- 2.2 The subject-matter of claim 1 is also disclosed by D2-D6 as follows:

D2, page 2, line 67-page 4, line 29;

D3, col. 1, line 40-col. 2, line 9, col. 7, line 26-col.8, line 18, col. 8, line 26-col. 9, line 6, figures 4-6;

D4, page 1, line 33 - page 2, line 52, figures 6-9;

D5, col. 2, line 29 - col. 3, line 46, col. 4, line 19-col. 5, line 25, figures 1,2;

D6, col. 4, line 13-col.5, line 38, col. 6, line 27-col. 7, line 51, col. 8, line 17-col. 9, line 15, figures 4-6.

3. The subject-matter of independent claim 10 and the additional features of claims 2-8, 11 are also disclosed by D1-D6, see on points 2.1 and 2.2.

Re Item VIII.

- 1.1 In claim 1 the features "chromatics" and "chromatic formulations" are present, which are defined only in the description on page 2, line 26 and page 4, lines 10-25 respectively, whereby the meaning of said feature is not clear from the wording of the claim alone (PCT Guidelines 5.31).
Claim 1 is therefore not clear (Art. 6 PCT).
- 1.2 In claim 1 the features "selection criteria" and "desirable" are present.
Said features are however so broad that they do not appear to have limiting effect on the scope of the claim.
Claim 1 is therefore not clear (Art. 6 PCT).
- 2.1 In claims 3 and 10 the features "generated nodes" and "computed nodes" are present, which are defined only in the description on page 5, lines 1-9 and page 5, lines 18-28 respectively, whereby the meaning of said feature is not clear from the wording of the claim alone (PCT Guidelines 5.31).
Claims 3 and 10 therefore not clear (Art. 6 PCT).
It should moreover be noted that in light of its definition, especially on lines 24-25, the feature "computed nodes" is so broad that it does not appear to have limiting effect on the scope of the claim.
3. In claims 1 and 10 the feature "algorithms" is present.
Said feature is however so broad that it does not appear to have limiting effect on the scope of the claims.
Claim 1 and 10 are therefore not clear (Art. 6 PCT).
4. In claims 3-8 the expression "optionally" is present.
It should be noted that the features following said expression are to be considered as entirely optional, said expression having no limiting effect on the scope of the claim (PCT Guidelines 5.40).

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/012233

5. Lines 1 and 2 on page 23 should be deleted (PCT Guidelines 5.30).